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SMEs and integration driving factors to regional and global value chains

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Abstract

The principal objective of this paper is to unravel and assess current integration factors of SMEs to global value chains from the internationalization perspective and through an information exchange between suppliers and buyers. The paper analyses a situation of one-way integration mode and information flow and outlines an existing gap in SMEs management approach. In order to succeed on international markets, it is needed to build up a network of awareness and information exchange between major actors such as SMEs, public and business support institutions, academia and other players. The article relates the key attributes of factors directly connected to SMEs and integration as well as concentrates on how SME could benefit from a closer regional economic integration through information exchange.

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Keywords: internationalization; value chain; SMEs; information exchange; integration.

1. Introduction

SMEs are often referred to as the backbone of the European economy, providing a potential source for jobs and economic growth (Eurostat, 2013). The small businesses sector is similar in structure across EU27 countries and occupies the major part of all economies in terms of numbers of firms. These vary from 99.5% to 99.8% of the total

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number of enterprises on average across EU Member States as reported in Table 1. Since exports of goods and services generate from 49% in Sweden and 52% Germany to 84% in Lithuania and even 92% in Estonia as share of GDP, SMEs play an essential role in the countries' economic development (World Bank, 2013). There is a myth that only large MNEs usually do business abroad and SMEs mostly operate domestically. Even some start-ups attempt to do business abroad from inception (Peng, 2011).

Table 1. Composition of companies in the European Union

	Number of enterprises	Turnover	Value added
	Share in total, %		
All SMEs	99.8	57.4	58.7
Micro	92.2	18.8	21.3
Small	6.5	18.7	18.9
Medium-sized	1.1	19.9	18.5
Large	0.2	42.6	41.3

In order to define driving factors for SMEs internationalization, authors have examined several areas such as theoretical background of existing approaches including regionalization, value chain approach and networks, assessed own experience in marketing, logistics and transport as well as reviewed a SMEs survey. Accumulated findings are summarized in conclusions.

2. Theoretical background

2.1. SMEs internationalization

International expansion is vital for SMEs and the next challenge appears on strategic approach to define a proper development strategy. As in smaller markets growth opportunities might be limited in a long term perspective, going internationally is an inevitable action for SMEs. Being flexible and easy adjusted to dynamically changing business environment, they have several options to expand internationally. SMEs could have three broad modes for entering foreign markets: direct exports, licensing / franchising and foreign direct investments (Peng, 2011). The term "internationalization" commonly refers to the process of increasing international operations (Carter & Jones-Evans, 2006) where three theoretical approaches can be identified: (1) incremental internationalization (or stage of development) models, (2) network theory and (3) resource-based perspectives (incorporating business strategy, contingency and international entrepreneurship perspectives). Further paper's authors accumulate their experience in international business and summarize following modes of international presence and expansion: (1) acquisition of an existing company in a target market, (2) establishing of new companies in other countries, (3) partnership and mutual cooperation on long-term win-win approach. First two could be rather costly for SMEs where partnership is expected the most applied mode for international growth. Thus, an identified mode of partnership is one of factors which define degree of SMEs integration in regional and global value chains.

Distance between two countries could manifest itself along four basic dimensions: cultural, administrative, economic and geographic (CAGE). This framework helps to identify and assess the impact of distance on various industries. In general, the farther a country is from a SME operating home-country, the harder is to conduct business in that country. Geographic distance might affect transport and communication costs or other transaction costs where cultural dimension would impact consumers preferences, way of doing business and other important areas such as way of establishing contacts, communication itself due to similar business culture, understood languages or social norms (Ghemawat, 2001; OECD, 2013). Formal and informal institutions also matter significantly in this integration process.

Furthermore, there are two important features of regionalization. Some initiatives are proposed along continental lines, secondly, regional agreements are put forward or accelerated in various parts of the world simultaneously (Wei & Frankel, 1995). Taking into account geographic proximity, this might make impact on trade as it becomes even more regional within trade blocks or neighbouring regions. As an example, Lithuania being "sandwiched" between European Union and CIS countries, trades with these two regions mostly. Country's foreign trade with EU, EFTA and CIS countries accounted more than 90% of total trade in January-June 2013. The regional integration is evident as the Nordic and Baltic region (total population 30 ml.) compiles around 20% of total country's foreign trade (Statistics Lithuania, 2013).

Thus, geographic proximity is another important factor in integration. However, beyond geographical proximity, organizational proximity and social interactions are very important as well: externalities probably channel through "high-quality" individual and business relationships. Geographic proximity is necessary to facilitate mutual knowledge and social interactions. This result is interesting for policy maker since it points to the benefits of a very local approach to cluster policies (Duranton, Martin, Mayer, & Mayneris, 2010). Cultural approach determines how people interact with one another and with companies and institutions. Exchange of information in accepted ways and endorsed by different countries according to recognized rules could enhance probability of integration at SMEs level (Ghemawat, 2001). This second factor will be analyzed in following chapters and summarized in conclusions.

Small firms have various advantages on international markets. Especially recent start-ups can be very dynamic and innovative. A few very high-performance new and small firms can make an important contribution to employment creation and economic growth. Although the majority of small firms have more modest economic impacts individually, taken together they make an important contribution (OECD, 2012).

2.2. Global value chains

Global value chains (GVC) are a major driving force of globalization that also promotes integration on multiple levels (WTO, 2013). A value chain refers to the full spectrum of value added activities required to bring a product from its conception, through design, sourcing raw materials and intermediate inputs, production, marketing, distribution and support to final consumers. The complexity of the value chain and the business relationship between the various components also varies from industry to industry and company to company and country to country. Similarly, a value chain can also span enterprises in a local economy or a regional grouping of economies. Value chains become "global" when their component activities are geographically spread across several economies. This approach could also be extended by solutions to dispose products after use. Value chains also could become "regional" when companies develop their integration related activities within a special region or countries in a region (Chang, Bayhaqi & Yuhua, 2012).

Value chains also could be different in sectorial and international approach. A value chain for apples is very differently organized than an iron ore chain. A global automobile chain is difficult to compare with the production of staple foods for the local market. International chains, for example, require market access abroad, which requires good quality products (van Dijk & Trienekens, 2012).

Another important factor is to understand a mode how a SME might be integrated in value chains itself. A different approach might be applied in domestic country and completely different in foreign markets. If a SME can offer own brand and more value-added products and services on local market, potential partners might be different in other countries. There are important explanations that companies, regions and countries embed themselves in inappropriate way into global value chains. It is typicall that a manufacturer specialises in those relations with value chains where a high competition is obvious and global trade is declining. When manufacturers of a specific country or regions are not able to embed into global markets, this could make negative impact on their overall economic situation which might be even worth before integration process have began (Ghemawat, 2001).

In 2012 the world became less globalized then 2007. Global connectedness was impacted by economic recession and despite a modest growth since 2009, it did not achieve a level of 2007. Regional trade relations dominate. Furthermore internationalization has several stages; it includes export and others (Peng, 2011). However, import should not be underestimated which facilitates productivity by applied the latest technologies. Import could even be the first stage in internationalization for SMEs in particular, staring to export later. In conclusion, there are two other important factors which make impact on companies' growth globally: (1) international trade and (2) exchange of information (DHL, 2012).

Geographic proximity facilitates communication between forms and the diffusion on information among firms increases their productivity. On the other hand of the value chain have extended interaction with different types of sub-suppliers. Standard products and components are increasingly sourced externally. Companies provided both financial resources and competence to sub-suppliers in order to increase collaboration. Integrative activities are disseminated to wider areas thus facilitating the participation of SMEs and sub-suppliers in global value constellations (Kristensen, Lilja, 2011). Firms try to control the ends of the value chain, mostly from advanced market economies. They are faced with increasing competition and especially from new entrants from emerging market economies. They have strong incentives to increase the efficiency and effectiveness of the high value-added activities that they control. Hence, value chain integration process through information and feedback is a crucial factor both for emerging companies as well as for dominant and current market players in a value chain of a particular product or service (Mudambi, 2008).

A phenomena might be noticed during the recent years. From one side when transaction costs (the costs of doing business) decline, it might easier for companies to do business globally and they should not limit their potential with neighbouring countries only (Fig. 1). Shipment costs became relatively lower, Internet connection and communication facilitate faster contact establishment worldwide. Hence, regionalisation might not so important. On the other hand, recent studies make evident that trade still remains more regional (DHL, 2012). International transaction costs are relatively higher compared with domestic transaction costs. Geographic proximity still plays the crucial role in international business development.

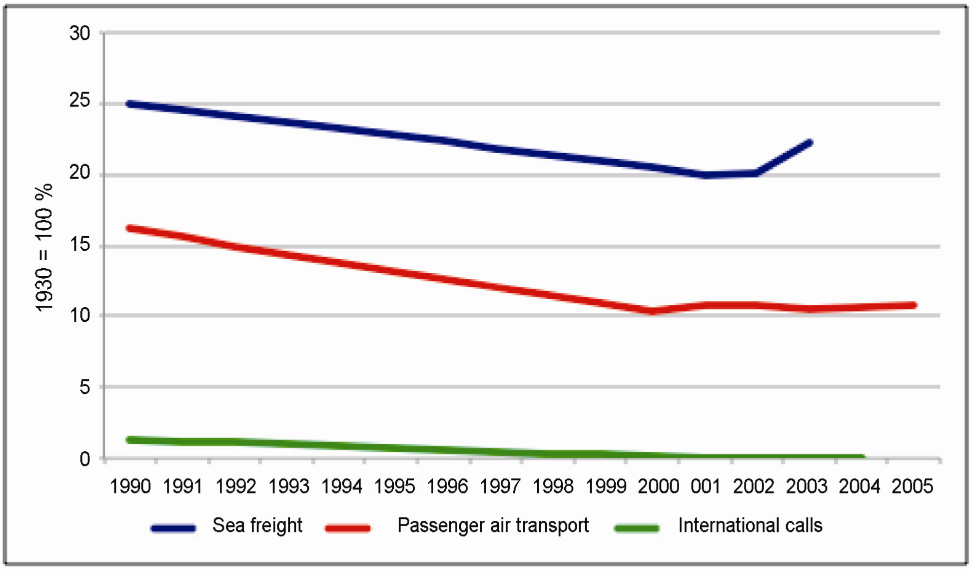

Fig. 1. Transaction costs have diminished (Source: OECD, 2013)

Geography organized in industrial clusters is also risky: industrial sectors have existed since the industrial revolution but the decline of certain sectors (steel, textiles and other) has translated into a decline of certain regions that had their fate tied to a single sector. The large agglomerations have survived and developed thanks to diversified economic structure. It is impossible today to determine which sectors will be declining tomorrow. Globalization has certainly increased this uncertainty and the risk of territorial specialization (Duranton, Martin, Mayer, & Mayneris, 2010). Hence, an expansion strategy at firms and countries levels can be determined by selected geographic regions and selected industrial sectors.

2.3. Networks and information exchange

Networks play an important role in economic integration. Companies survival could be assured by four types of relations: family and ethical cohesion, buyers-suppliers relations, geographic proximity and investment or organizations interconnections as shown in Table 2. Networks are growing relations system between different actors (companies, institutions) which coordinate and define their activities scope and where network size is defined by a number of acting actors (Todeva, 2006). Geographic proximity is one of the major factors leading to a close cooperation between companies as presented in Table 3.

Table 2. Small-firm networks

Network type	Linkage characteristics	Example	Issues
Family and ethnic	Ties based on family and personal contacts	Family business, ethnic minorities	Dependence on ethnic resources, enclave economies
Place	Geographical proximity and shared commitment derived from common values and goals	Silicon valley	Sustainability, variation between industrial districts, origins of a barrier to replication
Organizational	Investment or ownership ties or membership of industry associations	Business groups, JV, chamber of commerce, industry bodies	Small firm status in horizontal and vertical groups, influences on industry cooperation
Buyer-supplier	Interaction to chance role of suppliers and subcontractors	Relational subcontracting	Extent of change in subcontracting, use of vendor rating, impact of global manufacturing

Clusters theory focuses on an approach related to how comparison of economically linked firms and institutions in a specific geographic location affects competitiveness. This theory also unites network theory and competition. A cluster is a form of a network that occurs within a geographic location, in which the proximity of firms and institutions ensures certain forms of communalities and increases frequency and impact of interactions between these actors. At the same time network theory might inform how clusters work and can become more productive. Trade associations play important roles in facilitating of networks formation (Porter, 2008). For companies it is essential to "navigate" between these theories and apply a most relevant. Membership of national and international communities (confederations, trade associations, chambers) could facilitate a better integration of a SME internationally through partnership, established contacts and cooperation. Sölvel (2009) proposes following actors on the cluster stage which provides with a wide picture by involving SMEs, networks and other important stakeholders: finance (banks, venture capital, business angels), industry (buyers, suppliers, related industries SMEs, services), public bodies (regional authorities, agencies), university (technology parks, laboratories, tech transfer offices), media, organisations for collaboration (formal and informal networks, trade associations, cluster organisations).

Table 3. Concepts of a network

Concepts	Operational definitions	Example of application
Node	A member of a network and an actor or an agent that is linked to or involved in a relationship with other actors/agents	Firms connected in a value chain
Closeness/proximity	A measure of the distance between two actors	Two firms are close if they can connect as directly as possible with a minimum of intermediaries
Network	Emergent system of relationships between self-organizing actors	A set of business partners

Academic sources provide with a different network mapping. In network theory, markets are seen as a system of relationship among different players such as suppliers, buyers, competitors, public and private agencies (Todeva, 2006; Carter &Jones-Evans, 2006; Perry, 2012).

According to paper authors, it is reasonable to highlight several of them which are applied more widely and at the same time make impact to regional integration:

- Value chain network, where actors between nodes are connected by input-output chain (Fig. 2). This network has a feature when actors do not receive feedback from the next actor in the chain. Information circulation is

not present and dominates one-way information flow. A supplier which is usually a SMEs does not manage and is not aware of further processes afterwards goods and services are delivered. As DHL survey (2012) justifies, information exchange is one of essential factors in globalization
- Clustered networks, actors operate in high density several places under a close cooperation
- Core and periphery, different cooperation in two levels
- Small networks, actors in a large geographic distance create spatial bridges by connecting network parts and shortening distance

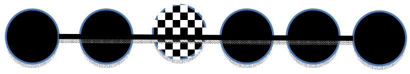

Fig. 2. Network mapping-value chain (Source: Todeva, 2006)

Following factors play an important role in network structure such as: (1) network size of number of actors, (2) network density (intensity of central actor's contacts number), (3) different proximity between actors, their roles and positions, (4) communications linkages structure between network nodes and other (Todeva, 2006).

It makes evident that communication approach and feedback between actors in a network is an essential and inevitable where network mapping (Fig. 2) shows that usually there is dominating one-way information flow. Paper's authors have decided to look deeper into a survey and analyse this information exchange factor more comprehensively.

3. Method

SMEs could experience a number of obstacles at different stages in the internationalization proces. This could be indentified in four categories (Carter & Jones-Evans, 2006):

- Internal-domestic (limitations within a firm and relating to home country environment: lack of personnel, knowledge about export marketing, planning)
- Internal-foreign (limited marketing ability and experience in overseas target markets)
- External-domestic (absence of adequate government support (incentives and infrastructural) to overcome internationalisation barriers)
- External-foreign (are typically experienced in the international markets by foreign government imposed restrictions, development by a SME of reliable overseas contacts, cultural differences)

This paper focuses on the second obstacle (internal-foreign) where a SME might lack further information on market access on business environment and opportunities afterwards partnership is established with a partners in foreign countries. Such approach limits SMEs awareness towards an expanded value chain, delivered products and services with higher value added. Limitations might cause lower productivity through lower created value as the productivity itself is defined by the value of outputs produced divided the values of input resources (Krajewski, Ritman, & Malhotra, 2007).

3.1. SMEs survey

The paper draws on data obtained from a survey of 70 Lithuanian SMEs oriented and involved in the regional cooperation which covers Nordic and Baltic regions. Represented industry sectors are such as food processing, services, furniture, metal processing, construction and other. Some findings in a previous research show that Nordic countries have slightly dominant roles as „bridges" for further regional and global integation of Lithuanian companies (Slepniov, Brazinskas, & Wæhrens, 2013). Analysing further an expanded number of surveyd SMEs, it is essential to look into information flows and feedback according to network mapping-value chain (Fig. 2). In addition, hidden costs warn on business development, it includes overall transactions, business environment and must be analysed more comprehensively (Kontrimas, 2013).

Companies in the survey have been asked to respond to: first, on their awareness by accessing other markets through established cooperation with respective country's companies, second, information feedback from partners (buyers) to respective SMEs (suppliers) afterwards SMEs have delivered products and services to these foreign partners and have been integrated into international value chains. Business practice shows that afterwards goods or services are delivered to a partner, a feedback has to follow and a supplier is informed about further application of these goods or services within a value chain. Such cooperation and information exchange are based on mutual partnership where personal contacts play an important role as well.

3.2. Survey report

The report was compiled on the basis of companies responses which contained three options: (1), companies were aware that their products and services have reached other markets through an established cooperation with a foreign partner, i.e., feedback information flow is present, (2) an evident statement that products and services did not reach other markets and have been used in foreign partner companies, (3) companies do not have any feedback from a foreign partner on further use or distribution of delivered goods.

Six countries were represented in the survey. Denmark has a dominant role in integration process for Lithuanian SMEs by accessing other markets where Latvia, Estonia and Finland have higher percentage of accumulated local „absorbtion" of goods and services afterwards delivered to these countries companies, i.e., there is a limited further geographic expansion to other countries globally (Fig. 3). Following hypothesis has been set as there is rather high percentage of responses where SMEs do not posses a feedback from their partners once deliveries have been executed and this is exactly as it is showed earlier when one way information flow dominates (Fig. 2).

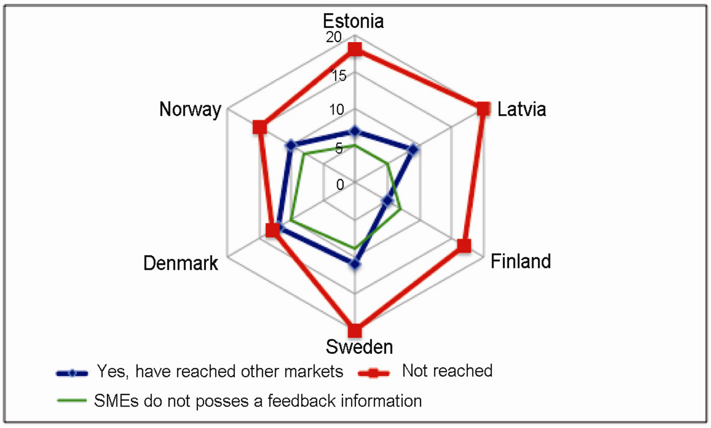

Fig. 3. Access to other markets through integration in value chains and SMEs awareness of a feedback within a value chain

The findings lead to a more critical approach that SMEs have to maintain close relations based on a partnership with their partners by achieving a long term win-win opportunities.

3.3. Proposals to foster SMEs integration

In order to facilitate an information exchange process, authors have looked to an extended value chain by involving more actors in business process in value chain development and have proposed more expanded picture (Fig. 4). As indicated earlier, trade associations and other actors play dominant role in networks (Porter, 2008). Hence, an expanded environment around a SME leads to a more facilitated and dense network of actors who facilitate SMEs growth locally and internationally.

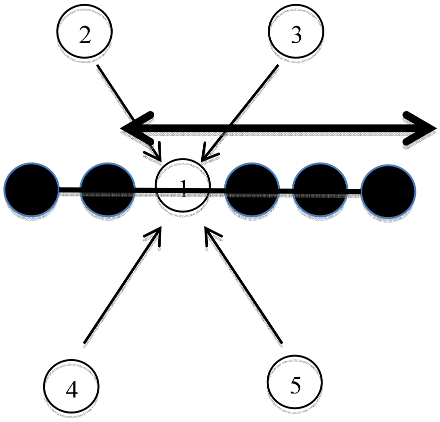

Fig. 4. Extended value chain and interaction between major actors (Source: authors conducted based on Todeva, 2006)

Proposed extended value chain (Fig. 4) involves a broader number of actors in comparison to the indicated number in previous value chain (Fig. 2), where: (1) analysed company which delivers goods and services for a company in other country, (2) public bodies facilitating international relations, (3) NGOs related to international activities, (4) academic institutions related to researches and international science-business cooperation, (5) private networks of services such as consulting and training companies, experts and other service providers. All these four actors support a firm by respective services and create a business friendly environment to lead a SME to international expansion. Such prepared firm communicates and exchanges information with their partners between nodes in a network, positions in a value chain rightly and enhances its competitiveness by providing products and services with a higher value added. In conclusion, the extended value chain (Fig. 4) has been constructed on the basis of authors' personal business experience and a theoretical review of literature.

Synergy of these actors and their coordinated actions create a business friendly environment around a SME which plays a supportive role during entire growth path internationally and integration process by an approach to embed in a right position of a value chain. Public bodies, agencies initiate market access and international growth programs, NGO and trade associations provide with a wide network throughout their members in other countries, international forums and specialised trade fairs, academic institutions deliver related researches to assess market opportunities where private networks and training companies provide with capacity building and trainings as companies needs for knowledge is unlimited.

4. Conclusions

This paper analyses a role of regional integration and positioning in value chain through a network and value chain based approaches. It also defines factors which facilitate such integration.

There are three factors which have been constructed on the basis of a theoretical review of the literature: (1) geographic proximity between firms, (2) diminishing transaction costs, (3) mode of SMEs integration into value chains (own brand and distribution channels establishment, original equipment manufacturer (OEM), subcontracting).

In addition other four factors have been identified and analysed which define a degree of integration into international value chains:

- Partnership and information exchange. As it became evident from the review of the literature and survey, that predominating one-way information flow limits SMEs growth opportunities. Established mutual partnership between two or more actors in a network, information exchange and common strategies development lead to win-win situation and mutual benefit through created and manufactured value-added products and services.
- Geographic proximity growth in neighboring markets is a start in internationalization process for a SME. A domestic market is not excluded. However, often based on limited growth opportunities on a local market, firms

consider market access potential in other markets where neighboring countries are a potential destination in the first stages of international expansion.

- Established networks and clusters provide with a relevant mechanism for firms to enhance their market presence and growth. However, authors do not claim that both should be followed. A cluster is more related to geographic approach and involves a large number of different players (Porter, 2008; Sölvel, 2009). Networks can be easier accessed and require less actors, e.g., trade associations (Porter, 2008). Through a membership at local, international and sectorial bodies the firms can benefit through established partnership.
- Firms posses unlimited demand for knowledge where own resources can be limited. Thus, attracted external actors can provide with market intelligence, capacity building services which would enhance firms potential to grow internationally. An approach science-business can be also strengthened by bridging educational and business entities and implementing market intelligence, training and capacity building initiatives.

These additional four factors have been constructed on a basis of summarized sources such as: (1) personal business experience, (2) survey and results report, (3) theoretical review of literature. Our findings shows that embed into a right position of a value chain leads to international growth and growing competitiveness through higher value added products and services. However, this process is timely and developed on mutual partnership.

The empirical base of the paper is limited to Lithuanian SMEs. Authors do not claim that these factors are over dominating other important features. However, based on this article, SMEs can draw their attention to role and importance of information flows, demand on long lasting partnership, networking, market access strategies development and continuous capacity building which lead to business environment understanding and growth.

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